

REMARKS

Reconsideration and allowance in view of the foregoing amendments and the following remarks are respectfully requested.

By this Amendment, Claims 5 and 29 have been canceled without prejudice or disclaimer. Favorable consideration of pending Claims 1-4 and 6-28 is respectfully requested.

THE OBJECTION TO THE ABSTRACT OF THE DISCLOSURE

The Applicant notes that there is no statutory requirement for an Abstract to *exceed* 50 words. Specifically, 37 CFR 1.72 only states that the abstract “may not exceed 150 words in length.” Still, because MPEP §608.01(b) does advise that that the Abstract *should* be in narrative form and “generally limited to a single paragraph within the range of 50 to 150 words,” the Applicant has submitted the above substitute Abstract. Favorable consideration is requested.

THE OBJECTION TO THE DRAWINGS

The Applicant disagrees with the assertion that Figs. 1, 4, and 5 should be labeled as prior art. That is, Figs. 1, 4, and 5 are all relevant to example embodiments of the invention as described and claimed within the present application, and therefore should not be labeled as prior art.

In the specification of the present application, page 5, lines 4 and 5 states, “Fig. 1 is a block diagram of a computer system incorporating the teachings of the present invention;” page 16, lines 20-22 states, “Fig. 4 graphically represents

a logical and architectural model of the operation of the data structure memory manager 218 according to one implementation of the present invention"; and page 17, lines 22 and 23 states, "Fig. 5 is a flow chart of an example method for building a language model data structure, according to the teachings of the present invention."

The foregoing descriptions of Figs. 1, 4, and 5, particularly the underlined portions, show that Figs. 1, 4, and 5 are relevant to the present invention, and therefore there is no need to label the drawings as being prior art. The Applicant requests that the statement that the drawings be labeled as prior art be withdrawn.

THE OBJECTION TO THE CLAIMS

Page 2 of the Office Action includes the following statement, "It is notified that claims 1 and 24 do not recite preambles, which are related to the limitations." There is no statement requiring, or even urging, a revision to the claims. However, even if such statement was included in the Office Action, the Applicant respectfully notes that the discussion regarding claim preambles in MPEP §2111.02 does not include any requirement that a claim have a preamble "related to the limitations." Therefore, none of the current amendments to the claims are presented in response to the implied objection to the claims.

THE REJECTION UNDER 35 U.S.C. §112, SECOND PARAGRAPH

By this Amendment, Claim 2 has been amended to provide sufficient antecedent basis for the elements of Claim 4. Further, Claim 25, 27, and 28 have

been amended, and Claim 29 has been canceled, to eliminate any purported instances of indefiniteness.

Accordingly, it is respectfully submitted that the pending claims are in compliance with the requirements of 35 U.S.C. §112, second paragraph, and therefore it is requested that the corresponding rejection be withdrawn.

THE REJECTION UNDER 35 U.S.C. §101

In response to the rejection of Claims 1-29 under 35 U.S.C. §101, Claims 1 and 11 have been amended to more clearly recite post-solution activity for Claims 1-16. Notably, Claim 1 has been amended to recite the features of canceled Claim 5.

With respect to Claims 17-28, the Applicant respectfully traverses this rejection. Specifically, the rejection does not provide any substantive discussion to support the assertion that the data structure of Claims 17-22, the memory subsystem of Claim 23, the modeling agent of Claims 24-27, or the storage medium of Claim 28 are not tangible. Rather, the Applicant respectfully submits that the claims are in compliance with the requirements of 35 U.S.C. §101.

Therefore, for at least the reasons provided above, it is respectfully requested that the rejection under 35 U.S.C. §101 be withdrawn.

THE REJECTION UNDER 35 U.S.C. §102(b)

Claims 1-29 were rejected under 35 U.S.C. §102(b) as being anticipated by Kukich (ACM Computing Surveys, Vol. 24, No. 4, Dec. 1992: "Techniques for Automatically Correcting Words in Text"). The Applicant respectfully

traverses this rejection, as it applies to pending Claims 1-4 and 6-28, and further requests that this rejection be reconsidered and withdrawn.

MPEP §2131 states, in part, that “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Under such guidance, the Applicant respectfully submits that Kukich fails to anticipate the pending claims.

With regard to independent **Claim 1** and, therefore, dependent **Claims 2-4 and 6-10**, it is noted that the method of Claim 1 comprises, in part:

assigning each of a plurality of segments
comprising a received corpus to a node in a data
structure denoting dependencies between nodes;
calculating a transitional probability between
each of the nodes in the data structure

However, the Viterbi algorithm described on page 403, col. 1, lines 17-32 of Kukich (as cited in the rejection) does not denote dependencies between nodes or calculate a translational probability between of the nodes, as recited in Claim 1. Tellingly, the rejection does not direct the Applicant’s attention to any portion of the reference that purport to anticipate these features, nor does the rejection provide any discussion as to how such features might be inherent in the Kukich reference.

Therefore, for at least the reasons advanced above, it is respectfully submitted that Claims 1-4 and 6-10 are not anticipated by Kukich.

With regard to independent **Claim 11** and, therefore, dependent **Claims 12-16**, the rejection cites page 403, col. 1, lines 17-32 as anticipating “a method for predicting a likelihood of an item in a corpus;” and page 432, col. 1, paragraph 2 as anticipating the remainder of Claim 11.

The above-cited descriptions of Kukich do not anticipate Claim 11. In particular, the Probabilistic Parser described on page 432, col. 1, paragraph 2 of Kukich recomputes probabilities of words in a candidate list based on syntactic considerations. However, the reference fails to teach that any re-segmenting of the candidate list, and therefore fails to anticipate “iteratively re-segmenting the corpus” as recited in amended Claim 11. Further still, Claim 11 has been amended to recite, “predicting a likelihood of an item in the re-segmented corpus.” This feature is not anticipated by Kukich, either, particularly in view of the aforementioned lack of teaching by Kukich of the presently claimed “iteratively re-segmenting the corpus.”

Therefore, for at least the reasons advanced above, it is respectfully submitted that Claims 11-16 are not anticipated by Kukich.

With regard to independent **Claim 17** and, therefore, dependent **Claims 18-23**, the rejection cites page 383, col. 1, paragraph 3, lines 6-8 as anticipating “a data structure comprising one or more root nodes;” page 385, col. 1, paragraph 1, lines 4-6 as anticipating “a plurality of subordinate nodes, ultimately linked to a root node, cumulatively comprising one or more sub-trees;” and page 401, col. 1, paragraph 3 as anticipating “wherein each node of a sub-tree represents one or more items of a corpus and includes a measure of a Markov transition.”

Tellingly, the rejection does not assert that any portion of Kukich anticipates the Markov transition probability being between the node and another linked node, as in Claim 17. Even more particularly, the requirement of MPEP §2131 states that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a prior art reference (emphasis added). The emphasis on the elements being found within the reference as set forth in the claim is significant because there is no discussion in the reference (and certainly not in the rejection) that links the discussion of memory constraints affecting dictionary lookup techniques on page 383 with the later discussion of Markov probabilities on page 401. More succinctly, Kukich does not anticipate the data structure of independent Claim 17 or, therefore, dependent Claims 18-23.

With regard to independent **Claim 24** and, therefore, dependent **Claims 25-28**, the rejection cites page 403, col. 1, paragraph 2, lines 17-32 and page 380, col. 2, lines 17-20 as anticipating “a modeling agent comprising a controller to receive a corpus;” page 401, col. 1, section 2.2.5, lines 5-7 as anticipating “a data structure generator, responsive to and selectively invoked by the controller, to assign each of a plurality of segments comprising the received corpus to a node in a data structure denoting dependencies between nodes, wherein the modeling agent calculates a transitional probability;” page 432, col. 2, lines 1-16 as anticipating the modeling agent calculating the transitional probability “between each of the nodes of the data structure to determine a predictive capability of a language model represented by the data structure and iteratively re-segmenting,”

and page 426, col. 1, lines 4-14 as anticipating the iterative re-segmenting of the received corpus.

The cited portions of Kukich do not cooperate to comprehensively anticipate the features as set forth in Claim 23. That is, the reference includes mentions of various features of Claim 23, but does not include any teaching of such features as they are recited in Claim 23 or in dependent Claims 24-28, thus failing to meet the requirements for anticipating a claimed invention.

CONCLUSION

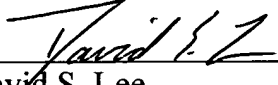
The remaining references of record have been considered. It is respectfully submitted that they do not compensate for the deficiencies of any of the references utilized in rejecting the pending claims. Thus, the Applicant requests that all of the

All objections and rejections having been addressed, it is respectfully submitted that the present application is now in condition for allowance. Early and forthright issuance of a Notice of Allowability is respectfully requested.

Respectfully Submitted,

Lee & Hayes, PLLC

Dated: May 3, 2004



David S. Lee
Reg. No. 38,222
(206) 315-4001

Lee & Hayes, PLLC
816 Second Avenue
Suite 200
Seattle, WA 98104